

Title (en)
METHODS AND APPARATUS FOR EDGE-BASED SPATIO-TEMPORAL FILTERING

Title (de)
VERFAHREN UND VORRICHTUNG FÜR KANTEN-BASIERTE SPATIO-TEMPORALE FILTERUNG

Title (fr)
PROCÉDÉS ET APPAREILS DE FILTRAGE SPATIO-TEMPOREL FONDÉ SUR LES CONTOURS

Publication
EP 1980109 B1 20180711 (EN)

Application
EP 07709894 A 20070130

Priority
• US 2007002578 W 20070130
• US 76425206 P 20060131

Abstract (en)
[origin: WO2007089803A2] There are provided methods and apparatus for edge-based spatio-temporal filtering. An apparatus for filtering a sequence of pictures includes a spatial filter (110, 190), a motion compensator (130), a deblocking filter (140), and a temporal filter (150). The spatial filter (110, 190) is for spatially filtering a picture in the sequence and at least one reference picture selected from among previous pictures and subsequent pictures in the sequence with respect to the picture. The motion compensator (130), in signal communication with the spatial filter, is for forming, subsequent to spatial filtering, multiple temporal predictions for the picture from the at least one reference picture. The deblocking filter (140), in signal communication with the motion compensator, is for deblock filtering the multiple temporal predictions. The temporal filter (150), in signal communication with the deblocking filter, is for temporally filtering the multiple temporal predictions and combining the multiple temporal predictions to generate a noise reduced version of the picture.

IPC 8 full level
H04N 19/80 (2014.01); **H04N 19/86** (2014.01)

CPC (source: EP US)
G06T 5/50 (2013.01 - EP US); **G06T 5/70** (2024.01 - EP US); **G06T 7/13** (2016.12 - EP US); **H04N 19/577** (2014.11 - EP US); **H04N 19/59** (2014.11 - EP US); **H04N 19/80** (2014.11 - EP US); **H04N 19/86** (2014.11 - EP US); **G06T 2207/10016** (2013.01 - EP US); **G06T 2207/20012** (2013.01 - EP US); **G06T 2207/20182** (2013.01 - EP US); **H04N 7/0142** (2013.01 - EP US); **H04N 19/615** (2014.11 - EP US); **H04N 19/63** (2014.11 - EP US)

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
WO 2007089803 A2 20070809; **WO 2007089803 A3 20071011**; BR PI0707346 A2 20110503; CN 101379827 A 20090304; CN 101379827 B 20110706; EP 1980109 A2 20081015; EP 1980109 B1 20180711; JP 2009525639 A 20090709; JP 5160451 B2 20130313; US 2010220939 A1 20100902; US 8135234 B2 20120313

DOCDB simple family (application)
US 2007002578 W 20070130; BR PI0707346 A 20070130; CN 200780003994 A 20070130; EP 07709894 A 20070130; JP 2008552501 A 20070130; US 22305107 A 20070130